CLAIMS

1. A driver circuit for a current driven element, the circuit comprising an n-channel transistor and a complementary p-channel transistor connected so as to operatively control, in combination, the current supplied to the current driven element.

2. A driver circuit as claimed in claim 1, wherein the complementary n-channel and p-channel transistors comprise polysilicon thin film transistors.

3. A driver circuit as claimed in claim 2, wherein the complementary n-channel and p-channel transistors are spatially arranged in close proximity to each other for providing a complementary pair of n-channel and p-channel transistors having approximately equal threshold voltages.

4. A driver circuit as claimed in any one of claims 1 to 3 connected so as to establish when operative a voltage driver circuit comprising respective storage capacitors for the n-channel and p-channel transistors and respective switching means connected so as to establish when operative respective paths to the n-channel and p-channel transistors for respective data voltage pulses.

5. A driver circuit as claimed in any one of claims 1 to 3 comprising respective storage capacitors for storing a respective operating voltage of the n-channel and the p-channel transistors during a programming stage, a first switching means connected so as to establish

when operative a first current path from a source of current data signals through the n-channel and p-channel transistors and the current driven element during the programming stage, and a second switching means connected to establish when operative a second current path through the n-channel and p-channel transistors and the current driven element during a reproduction stage.

6. A driver circuit as claimed in claim 5, wherein the first switching means and the source of current data signals are connected so as to provide when operative a current source for the current driven element.

7. A driver circuit as claimed in claim 5, wherein the first switching means and the source of current data signals are connected so as to provide when operative a current sink for the current driven element.

8. A driver circuit as claimed in any one of claims 5 to 7, further comprising respective further switching means respectively connected to bias the n-channel transistor and the p-channel transistor to act as diodes during the programming stage.

9. A driver circuit as claimed in claim 8, wherein the respective further switching means comprise p-channel transistors.

10. A driver circuit as claimed in any one of claims 5 to 9, wherein the circuit is implemented with polysilicon thin film transistors.

11. A driver circuit as claimed in claim 4, wherein the circuit is implemented using polysilicon thin film transistors.

12. A driver circuit as claimed in any preceding claim, wherein the current driven element is an electroluminescent element.

13. A method of controlling the supply current to a current driven element comprising providing an n-channel transistor and a p-channel transistor connected so as to operatively control, in combination, the supply current to the current driven element.

14. A method as claimed in claim 13, comprising the further step of providing the n-channel transistor and the p-channel transistor as polysilicon thin film transistors.

15. A method as claimed in claim 14 comprising the further step of spatially arranging the n-channel and p-channel polysilicon thin film transistors in close proximity to each other.

16. A method as claimed in any one of claims 13 to 15 comprising providing respective storage capacitors for the n-channel and p-channel transistors and respective switching means connected so as to establish when operative respective paths to the n-channel and p-channel transistors for respective data voltage pulses thereby to establish, when operative, a voltage driver circuit for the current driven element.

17. A method as claimed in any one of claims 13 to 15 comprising providing a programming stage during which the n-channel and p-channel transistors are operated in a first mode and wherein a current path from a source of current data signals is established through the n-channel and the p-channel transistors and the current driven element and wherein a respective operating voltage of the n-channel transistor and the p-channel transistor is stored in respective storage capacitors, and a reproduction stage wherein a second mode and a second current path is established through the n-channel transistor and the p-channel transistor and the current driven element.

18. A method as claimed in claim 17, wherein the first mode comprises operating the n-channel and p-channel transistors as diodes.

19. A method of controlling the supply current to an electroluminescent display comprising the method as claimed in any one of claims 13 to 18 wherein the current driven element is an electroluminescent element.

20. An organic electroluminescent display device comprising a driver circuit as claimed in any one of claims 1 to 12.

21. An electronic apparatus incorporating an organic electroluminescent display device as claimed in claim 20.

22. A circuit comprising a current driven element and at least two active elements, the current driven element being disposed between the two active elements.

23. A circuit comprising a current driven element and at least two active elements, the two active elements being connected through the current driven element together.

24. The circuit according to claim 22 or claim 23, wherein the two active elements are transistors.

25. The circuit according to claim 24, wherein the two transistors are mutually different channel type transistors.

26. the circuit according to claim 22 or claim 23, wherein the current driven element is an organic electroluminescent element.

27. The circuit according to claim 24, wherein the gates of the two transistors are each connected to a respective capacitor.

28. An electro-optical device comprising the circuit according to claim 22.

29. An electronic apparatus incorporating an electro-optical device according to claim 28.

30. A method for driving a circuit comprising a current driven element, a first active element, and a second active element that is disposed at a side of the current driven element

opposite to the first active element, controlling a current supplied to the current driven element by the first active element and the second active element.

31. The method according to claim 30, comprising the step of selecting the first active element to be a first transistor and selecting the second active element to be a second transistor.

32. The method according to claim 31, comprising a step of determining a gate voltage of at least one of the first transistor and the second transistor based on a predetermined current.

33. The method according to claim 32, comprising the step of causing the predetermined current to flow through a second current path different from a first current path that includes the current driven element.

34. The method according to claim 33, comprising the step of arranging the second current path to include at least one of the first transistor and the second transistor.